

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.05.2011

Version number 1

Revision: 03.05.2011

**1 Identification of the substance/mixture and of the company/undertaking**

- **Product identifier**
  - **Trade name:** Kerzensteckerfett ZKF  
Spark plug grease, ZKF
    - **Article number:** 0 890 300 029
  - **Relevant identified uses of the substance or mixture and uses advised against**
    - **Application of the substance / the preparation** Grease
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**  
BorgWarner BERU Systems GmbH  
Mörikestr. 155  
D-71636 Ludwigsburg  
Tel: +49 (0) 7141-132-0  
www.beru.com
  - **Informing department:** Qualitätslabor: +49 (0) 7141-132-0
  - **Emergency telephone number:** +49 (0) 6132-84463 (GBK Gefahrgutbüro GmbH)

**2 Hazards identification**

- **Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**  
The product is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Void
  - **Information concerning particular hazards for human and environment:**  
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
  - **Classification system:**  
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.
- **Label elements**
  - **Labelling according to EU guidelines:**  
Observe the normal safety regulations when handling chemicals  
The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials.
  - **Other hazards**
    - **Results of PBT and vPvB assessment**
      - **PBT:** Not applicable.
      - **vPvB:** Not applicable.

**3 Composition/information on ingredients**

- **Chemical characterization: Mixtures**
  - **Description:** Synthetic white grease.

· **Dangerous components:**

6996-67-9	Perfluoralkylether	50-100%
-----------	--------------------	---------

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 03.05.2011

Version number 1

Revision: 03.05.2011

**Trade name: Kerzensteckerfett ZKF**  
**Spark plug grease, ZKF**

(Contd. from page 1)

9002-84-0 Ethene, tetrafluoro-, homopolymer

25-50%

- **Additional information** For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

- **Description of first aid measures**
  - **General information** No special measures required.
  - **After inhalation** Supply fresh air; consult doctor in case of symptoms.
  - **After skin contact**  
Instantly wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
  - **After eye contact**  
Rinse opened eye for several minutes under running water.  
Call a doctor immediately.
  - **After swallowing** In case of persistent symptoms consult doctor.
  - **Information for doctor**
    - **Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
    - **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents**  
The product itself does not burn.  
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**  
Can be released in case of fire  
Hydrogen fluoride (HF)
- **Advice for firefighters**
  - **Protective equipment:**  
In case of fire wear breathing equipment being independent of ambient air and suit provided full protection against chemicals.
- **Additional information**  
Remove fill mass from incendiary zone, if possible.  
Provide for sufficient reservoirs for water for fire fighting.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation  
Particular danger of slipping on leaked/spilled product.
- **Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).  
Dispose of the material collected according to regulations.
- **Reference to other sections**  
No dangerous materials are released.  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.

(Contd. on page 3)

GB

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 03.05.2011

Version number 1

Revision: 03.05.2011

**Trade name: Kerzensteckerfett ZKF**  
**Spark plug grease, ZKF**

See Section 13 for information on disposal.

(Contd. from page 2)

### 7 Handling and storage

- **Handling**
  - **Precautions for safe handling**  
Avoid contact with eyes and skin.  
Don't eat, drink or smoke while working.
  - **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage**
    - **Requirements to be met by storerooms and containers:**  
Store in cool location.  
Store only in the original container.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:** Protect from heat and direct sunlight.
  - **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Control parameters**
  - **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
    - **Additional information:** The lists that were valid during the compilation were used as basis.
- **Exposure controls**
  - **Personal protective equipment**
    - **General protective and hygienic measures**  
The usual precautionary measures should be adhered to general rules for handling chemicals.
    - **Breathing equipment:** Not required.
    - **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
      - **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
      - **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
      - **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**  
Nitrile rubber, NBR
    - **Eye protection:** Tightly sealed safety glasses.
    - **Body protection:** Protective work clothing.

GB

(Contd. on page 4)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 03.05.2011

Version number 1

Revision: 03.05.2011

**Trade name: Kerzensteckerfett ZKF**  
**Spark plug grease, ZKF**

(Contd. from page 3)

### 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

- **Form:** Pasty
- **Colour:** Whitish
- **Odour:** odourless
- **Odour threshold:** Not determined.

· **pH-value:** Neutral

· **Change in condition**

- **Melting point/Melting range:** Not applicable
- **Boiling point/Boiling range:** Decomposition at heating.

· **Flash point:** Not applicable

· **Inflammability (solid, gaseous)** Not applicable.

· **Ignition temperature:**

- **Decomposition temperature:** > 290 °C

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Critical values for explosion:**

- **Lower:** Not determined.
- **Upper:** Not determined.

· **Vapour pressure:** Not determined.

- **Density at 20 °C** 1.92 g/cm<sup>3</sup>
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

- **Water:** Insoluble

· **Segregation coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

- **dynamic:** Not determined.
- **kinematic:** Not determined.

· **Solvent content:**

- **Organic solvents:** 0.0 %
- **Water:** 0.0 %

· **Other information** No further relevant information available.

### 10 Stability and reactivity

· **Reactivity**

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

To avoid thermal decomposition do not overheat.

· **Possibility of hazardous reactions** No dangerous reactions known

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

(Contd. on page 5)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 03.05.2011

Version number 1

Revision: 03.05.2011

**Trade name: Kerzensteckerfett ZKF**  
**Spark plug grease, ZKF**

(Contd. from page 4)

- **Hazardous decomposition products:**  
None in case of intended use and storage in compliance with instructions.

### 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:**
    - **Primary irritant effect:**
      - **on the skin:** Long-term skin contact may cause skin irritation and/or dermatitis.
      - **on the eye:** No irritant effect.
    - **Sensitization:** No sensitizing effect known.
  - **Additional toxicological information:**  
The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version.  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

### 12 Ecological information

- **Toxicity**
  - **Acquatic toxicity:** No further relevant information available.
- **Persistence and degradability**  
This product is according to previous experiences inert and non-degradable.
  - **Other information:** There are no data available about the preparation.
- **Behaviour in environmental systems:**
  - **Bioaccumulative potential** No further relevant information available.
  - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
  - **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
The waste code numbers mentioned are recommendations based on the probable use of the product.

· <b>European waste catalogue</b>	
12 00 00	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS
12 01 00	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 12*	spent waxes and fats

(Contd. on page 6)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 03.05.2011

Version number 1

Revision: 03.05.2011

**Trade name: Kerzensteckerfett ZKF**  
**Spark plug grease, ZKF**

(Contd. from page 5)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **Land transport ADR/RID (cross-border)**
  - **ADR/RID-GGVSE Class:** No hazardous good.
- **Maritime transport IMDG:**
  - **IMDG Class:** No hazardous good.
  - **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
  - **ICAO/IATA Class:** Not Restricted.
- **UN "Model Regulation":** -
- **Special precautions for user** Not applicable.
- **Transport/Additional information:** Not dangerous according to the above specifications.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Designation according to EC guidelines:**  
Observe the normal safety regulations when handling chemicals  
The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials.
  - **National regulations**
    - **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
  - **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet:**  
This Material Safety Data Sheet has been drawn up in cooperation with:  
DEKRA Industrial GmbH, Hanomagstr. 12, D-30449 Hannover,  
Tel.: +49.511.42079-311, reach@dekra.com.
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals